

REMARKS

A Request for Continued Examination is filed concurrently with this reply removes the finality of the rejection in the Office Action of March 29, 2004. Reconsideration of the present application is respectfully requested in view of the following comments.

1. In the Drawings

In the Action, the drawings were objected to on the basis of their failure to illustrate the dichroic elements or the fused optical waveguide elements of the combining unit 23. The "Replacement Sheets" now schematically show element 100 in FIGS. 4 and 7 which is provided to represent the dichroic elements and the fused optical waveguide elements of the combining unit 23.

The specification makes it abundantly clear that the combining unit may include dichroic elements or fused optical waveguide element on page 12, lines 6-13 as originally filed. Thus, the addition of the schematic element 100 in FIGS. 4 and 7 does not introduce new matter in the application since support is found in the specification.

Approval of the drawing changes is respectfully requested in the next office communication.

2. In the Specification

In the "Amendment of the Specification," the paragraph on page 12, lines 6-13 has been replaced by a new paragraph that includes reference numeral 100 for the "system" that may be dichroic elements, fused optical waveguide elements or any other elements leading to the same effect. No new matter is introduced into the specification. This amendment was necessitated by the amendment to FIGS. 4 and 7.

Approval of the amendment to the specification is respectfully requested in the next office communication.

3. In the Claims

In the following remarks, each of the objections and non-prior art rejections will be addressed. As a result of the remarks and amendments in the claims, approval of the amendment to the claims and withdrawal of the rejection of the claims is respectfully requested in the next office communication.

a. Claim Objections

In the Amendment of the Claims, claim 45 is amended to recite "ratio" as opposed to "radio." This amendment was necessitated by a typographical error which was identified by the examiner in the Office Action.

b. Rejection of Claims 27-31, 33-35 and 46 under 35 U.S.C. § 112, first paragraph

Claims 27-31, 33-35 and 46 presently stand rejected as failing to sufficiently enable a skilled artisan the manner and process of making and using the present invention. In view of the amendment to claims 27 and 35, this rejection is respectfully traversed.

Claim 27 has been amended to more clearly recite the subject matter of the combining unit and this new recitation sufficiently enables a skilled artisan to make or use the sorting device described therein. More specifically, the combining unit is recited as being arranged to combine the light from the optical waveguides into at least one light beam.

It is respectfully disagreed that a skilled artisan would not know how fused optical waveguide elements or dichroic elements are used in a combining unit. Fused optical waveguide elements are well known to skilled artisans for confining

and guiding a propagating electromagnetic wave. Moreover, dichroic elements are well known for reflecting light that they do not transmit. Definitions for these elements of the combining unit are easily obtained, such as on the Internet at www.fiber-optics.info in the illustrated glossary provided thereat. Moreover, numerous U.S. patents discuss combining units that may include, for example dichroic elements. Some of these easily obtainable U.S. patents include 6,626,540 and 6,781,641.

In view of the readily obtainable information regarding combining units available to skilled artisans, it is respectfully submitted that one of ordinary skill does not need any more guidance in the specification of the pending application since such an individual would readily be familiar with combining units and the possible mechanisms used in such combining units. Consequently, one of ordinary skill would have sufficient notice of the invention recited in claim 27 with the present description of the combining unit.

Thus, claim 26 presently complies with the enablement requirement of 35 U.S.C. § 112, first paragraph.

Claim 35 also presently complies with the enablement requirement of 35 U.S.C. § 112, first paragraph since it now recites "fused optical waveguide elements" as opposed to "wavelength technology." This claim complies for the same reasons described above in reference to claim 27 regarding the assumption that a skilled artisan would understand the meaning of fused optical waveguide elements.

c. Rejection of Claims 27, 32, 38-44, 46 and 47 under 35 U.S.C. § 112, second paragraph

Claims 27, 32, 38-44, 46 and 47 presently stand rejected as being indefinite. In view of the amendment to these rejected claims, this rejection is respectfully traversed.

i. Claim 27

Amended claim 27 is sufficiently definite in its current form. More specifically, claim 27 now recites that the waveguide system comprises the features recited in claim 27 and that at least one focusing unit guides one of the at least one light beam towards the rotating polygon. In the Action, this claim was rejected on the basis that it did not possess any relationship to the waveguide system and the rotating polygon of claim 26. Of course, it is readily evident that amended claim 27 overcomes this rejection in view of the positive recitation of the waveguide system and the polygon first recited in claim 26. Support for this amendment is clearly found in FIG. 7 and the description of this drawing figure in the specification at page 13, line 14 through page 14, line 6.

ii. Claims 32 and 46

Claims 32 and 46 have been amended to depend on claims 26 and 36, respectively. Hence, these claims no longer depend from canceled claims.

iii. Claims 35 and 46

Claims 35 and 46 now recite "waveguide elements" as opposed to "wavelength technology" and "waveguide technology", respectively. It is clear that the term "waveguide elements" denote structural features which are now schematically represented in FIGS. 4 and 7. Thus, these claims definitely and positively recite structural features of the invention.

iv. Claims 38-44

Amended claim 38, from which claims 39-44 depend, recites that the bundle of waveguides are arranged to receive an image projected thereon from a lens system. Claim 38 is rendered clearer by amended claim 36 which recites a waveguide detection system of which claim 37 recites that the bundle of waveguides

forms a part thereof. Claim 36 also differentiates the rotating polygon as forming a part of the waveguide transmission system of the inspection unit.

Support for both a waveguide transmission system and a waveguide detection system is found in FIGS. 7 and 8, and the accompanying description thereof in the specification at page 13, line 14 through page 16, line 22.

In addition, the term “or” and the following clause is not included in amended 38.

v. Claim 47

Amended claim 47 no longer has the clause “and/or” and instead simply recites “and” in its place.

4. Rejection of Claims 26-49 in View of the Cited Prior References

It is submitted that the proposed combinations of the prior art references cited against claims 26-49 are erroneous and misplaced since U.S. Patent 6,509,537 (Krieg et al.), which was cited as the primary reference in each of the combinations, does not qualify as prior art under 35 U.S.C. § 102(e) against the pending application. Thus, all of the rejections based on combinations of prior art references cited against the pending claims of the present application rise or fall with the Krieg et al. disclosure.

As is well understood, before prior art is available under 35 U.S.C. § 103, it must be known whether a patent or publication is in the prior art under 35 U.S.C. § 102. Accordingly, a 35 U.S.C. § 103 rejection is based on 35 U.S.C. § 102(a), 102(b), 102(e) depending on the type of prior art reference used and its publication or issue date (MPEP 2141.01). A PCT international application becomes a prior art reference under 35 U.S.C. § 102(e) when the requirements of 35 U.S.C. § 371(c)(1), (c)(2) and (c)(4) are fulfilled (MPEP 2136.03; see also MPEP 715 and 1896).

In view of the combination of the teachings of Krieg et al. with the other cited U.S. patents in the Office Action, the present obviousness rejection would be based on 35 U.S.C. § 102(e) if one of these references anticipated all of the features of claims 26-47.

The disclosure of Krieg et al. is a national stage application of PCT application PCT/EP99/03325 filed May 14, 1999 which was published on November 23, 2000 and has a 35 U.S.C. § 371(c)(1), (c)(2) and (c)(4) date of January 11, 2001. The Krieg et al. application is a pre PG-PUB since the PCT application was filed prior to November 29, 2000 via the PCT and thus the 35 U.S.C. § 371(c)(1), (c)(2) and (c)(4) date is the effective date as a reference under 35 U.S.C. § 102(e).

On the other hand, the present application has an earliest priority date under 35 U.S.C. § 119 of July 23, 1999 corresponding to the right of priority of Belgian application 9900503. The present application is a national stage of PCT application PCT/BE00/00088 filed on July 20, 2000 and claims the benefit of priority of the earlier-filed Belgian application. The present application is entitled to the foreign priority date of the Belgian application of July 23, 1999 which predates the effective 35 U.S.C. § 102(e) date of January 11, 2001 of the Krieg et al. application. The Examiner is encouraged to review the claim of foreign priority of the present application as indicated on the Declaration filed on June 3, 2002.

In addition, the Belgian application has a priority date which predates the publication of the PCT application of Krieg et al.

It is submitted that the Belgian application fully supports the subject matter recited in claims 26-47 in the present application.

In view of the right of priority of the present application that predates the critical reference date of the disclosure of Krieg et al., it is clear that the teachings of Krieg et al. are not available as prior art to reject the claims of the present application.

Accordingly, withdrawal of all of the rejection of claims 26-49 based on the cited prior art rejections is respectfully requested.

5. Request for a New Notice of References Cited

A new Notice of References Cited PTO-892 is requested in the next Office communication since U.S. Patent 6,509,537 (Krieg et al.) was not listed in the notice provided with the outstanding Office Action.

6. Conclusion

In view of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that claims 26-49 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicants' Attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

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amendment 290904.wpd

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Justin J. Cassell', written over a horizontal line.

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